500 foot Low Velocity Airdrop Delivery Capability (500' LVADC)

Overview:

Current airdrop systems require a minimum drop altitude of 750-2000 feet for heavy equipment drops. Survivability studies indicate that airdrop operations above 500 feet significantly increases potential for losses of aircraft in a low threat environment; characterized by small arms and shoulder fired surface to air missiles. The **500 foot Low Velocity Airdrop Delivery Capability** will complement existing combat delivery altitude for personnel, and it will remove constraints on mission planning and tactics.

Description:

The 500' LVADC will improve combat effectiveness by allowing aircraft to conduct operations at a lower altitude (500 ft. vs. 750 ft.). Through altitude reduction of up to 30%, there will be greater accuracy, reduced load dispersion and increased aircraft and equipment survivability. Initial developmental efforts will focus on the use of existing and/or modified standard low velocity airdrop components. Additional developmental efforts will explore extraction by main parachutes. Current technology supports the possibility of meeting a 500-foot capability through extraction by main parachutes and a towed parachute initiated release system. The 500' LVADC-Light will be developed first, and will have the potential of dropping cargo between 2,200 and 22,000 pounds, while the 500' LVADC-Heavy will have the potential for dropping between 20,000 to 42,000/60,000 pounds gross rigged weight cargo when deployed from aircraft at speeds of 130 to 150 KIAS.

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Latest Version

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